Page 11, line 1, after "or" insert --by--;
line 3, change "Figs.9, 10" to --Fig.9--;
line 4, change "time" to --timing--;
line 5, change "11c" to --10c--;
line 6, change "11d" to --10d-- and after "in" insert --the microprocessor subsystem 20 of-- and after "signals (" insert --the packs of strobe pulses, see-- and change "11e" to --10e--;
line 7, after " " insert --(an appropriate different quantity of strobe pulses)--;
line 8, after "beam." insert --The quantity of the strobe pulses within the strobe pulse pack contains information about particle size. The more strobe pulses within the strobe pulse pack, the bigger particle size. The quantity of the identical strobe pulse packs (packs, having the same quantity of strobe pulses within) characterizes the quantity of the identical size particles.--;
line 9, change "the sensitivity" to --precision and--;
line 17 (last line on page 11), change "disc" to --disk--.

Page 12, line 1, before "subsystem 14" insert --floppy disk means and an external interface means (all of them not shown). The control subsystem 13 also includes the self-diagnostic and calibration means (not shown), connected to an analog-digital--
line 2, change "12" to --11--;
line 3, change "laser beam source)" to --laser)--;
line 4, after "optic" insert --connecting--;
line 7, change "effective method and device, which provides" to --effective methods and devices, which provide--;
line 9, change "of air" to --of air, gas--;
line 11, change "an improved" to --of improved--;
line 17, change "for improved amplitude" to --for an improved timing--;
line 18, change "(" to --,--.

Page 13, delete lines 1,2 in their entirety;
line 3, change "unfocused" to --non-focused-- and after "in the" insert --some--;
line 4, delete ")";
line 6, after "detector" insert --and can not require a power light beam, as it is necessary for the scattered light detecting system--.

In the Claims:

Cancel Claims 18-31 and substitute new Claims 32-42, as follows:

32. A method for counting and measuring a particles illuminated by a light beam and including the steps of:

providing a light detecting system, including a chamber, having a particle monitoring region;

providing a low power light source means forming said light beam directed through said particle monitoring region to a light detection means placed within said chamber on a light beam axis;

providing an intersection of said particles with said light beam at a point within said particle monitoring region so that said particles are monitored in said chamber, and wherein said intersection is occurred at said point located on said light beam axis and substantially in an area of said light detection means;

non-optic imaging detecting by said light detection means a light created by said intersection of said light beam with said particles flowing through said particle monitoring region of said light detecting system, and providing an output which is effectively indicative of a duration of said light proportional to a size of said particles.

33. The method of claim 32, wherein said chamber further has an inside black flat coating, providing an absorption of a reflected by particles light and elimination of a light background.

34. A device for counting and measuring particles illuminated by a light beam includes:

a light detecting system, including a chamber, having a particle monitoring region within which said light beam intersects said particles at a point on a light beam axis;

a low power light source means forming said light beam directed to said particle monitoring region so that said particles are monitored at said point;

a light detection means, providing non-optic imaging detection of said particles, is placed within said chamber on said light beam axis so that said particle monitoring region is located substantially in the light detection means area between the light source means and said light detection means, and wherein said light detection means provides an output which is effectively indicative of a duration of a light created by the intersection of said light beam with said particles and proportional to a size of said particles;

a signal processing system, processing said output.

35. The device of claim 34, wherein said signal processing system includes a control subsystem connected to an analog-digital subsystem, comprising an amplifying means connected to a digital pulse forming means, and wherein said amplifying means is connected to said light detection means.

36. The device of claim 35, wherein said control subsystem comprises a microprocessor subsystem and a terminal means connected to each other.

37. The device of claim 34, wherein said low power light source means further is a remote light source means connected by a fiber optic connecting means to said light detecting system.

38. A method for counting and measuring particles illuminated by a light beam and including the steps of:

providing by a light detection means an output which is effectively indicative of a duration